Jorgen Boldt

Personal Information	Nationality: Danish Year of birth: 1950
Contact	Email: JB@JorgenBoldt.dk Phone: +45 2929 2700 www.JorgenBoldt.dk
Education	M.Sc. Degree from the Technical University of Denmark, Laboratory for Energy Engineering, 1976. Ph.D. Degree from the Technical University of Denmark, Laboratory for Energy Engineering, 1984
Position	Freelance Consultant
Years	October 2012 to present
Key qualifications	Dr Jorgen Boldt is an experienced project manager and team leader, very conversant with international projects. His knowledge of the energy sector is extensive and comprehensive, stemming from a multitude of different activities for more than 30 years. Primary focus areas have been renewable energy, generation of electricity and heat, energy sector policies and planning, and climate change. This covers both detailed technology analyses plus a wide range of crosscutting issues, e.g. economic and financial analyses, barrier removal, policy and strategy formulation, and institutional development. Within energy policies Dr Boldt has worked at regional and national level. This has included recommendations for policy and regulatory actions, strategic plans, sector reform, barrier analysis and removal, formulation of legal framework and instruments, and institutional development. Within energy planning Dr Boldt has worked at regional, national and municipal level. This has included analyses of historic trends, demand forecasting, expansion plans, integrated resource planning, national action plans for technological development, infrastructure development, environmental and social impacts of new energy installations. On renewable energy Dr Boldt has detailed technological experience with solar energy, wind energy, and energy from biomass and waste. His primary focus has been implementation of renewable energy in Denmark and in developing countries (Africa and South-East Asia). On climate change issues Dr Boldt has done pre-feasibility studies, conducted training on UNFCCC procedures and modalities, and identification and development of projects. He has developed CDM projects in Armenia, Georgia, Azerbaijan, Kazakhstan, Kyrgyzstan, Uzbekistan and South Africa, and JI projects in Bulgaria. Dr Boldt has comprehensive experience in working in a national administration from two periods in the Danish Energy Authority; Electricity 1986-90 and renewable energy 1991-96. In most of his activities Dr Boldt has been the project manager.

Experience

October 2012 – present	Freelance Consultant Based in Denmark
February – October 2012	Indonesia Sustainable Consumption and Production: Policy Support – Indonesia. The objective of this 3-year project is to promote an integrated and coordinated approach in developing and implementing the national policies on Sustainable Consumption and Production (SCP) by strengthening coordinated nation-wide SCP implementation and facilitating the development of the SCP National Action Plan, implementing SCP policies and identifying and evaluating options of financial mechanisms to promote SCP. The project is part of EU's SWITCH Asia Programme (www.switch-asia.eu). Position: Team Leader (resident). Clients: Delegation of the European Union to Indonesia and the Ministry of Environment, Indonesia.
June 2005 – January 2012	Wazee Consulting Own company / free lance. International consultancy in energy policies, energy planning, energy technologies, climate change.
June – December 2011	Denmark Technology data for energy plants. The catalogue comprises technology descriptions, technology and economic data of various energy technologies, including forecasts until 2050. The aim of the catalogue was to establish a uniform, commonly accepted and up-to-date basis for energy planning activities such as future outlooks, evaluations of security of supply and environmental impacts. The purpose of this particular project was to update and expand a similar catalogue developed in 2003-2004 and 2009-2010, also by Boldt. Project Manager. Clients: Danish Energy Agency and Energinet.dk (the Danish electricity system operator).
July – August 2011	Denmark Analysis of Danish industrial and R&D strongholds within energy efficiency, smart grids, wind energy, and bioenergy. Project manager. Client: Ministry of Climate and Energy.
May – November 2011	Vancouver Island, Canada Regional integrated energy mapping and analysis for the Cowichan Valley Regional District (CVRD). The objective was to complete a series of thematic GIS maps and associated databases of potential renewable energy resources and energy consumption in the CVRD (77,000 inhabitants). This lead to a scenario analysis

	(2010-2050) of opportunity costs and issues related to regional energy resilience. Energy planning and renewable energy expert; developed a scenario model. Client: Ea Energy Analyses, commissioned by the CVRD.
June 2011 – May 2012	Serbia Sustainable development in energy sector. Serbia wishes to become a member of the European Union, and for this purpose, the overall objective of the project was to assist Serbia in creating sustainable development by enhancing capacities in the energy sector to efficiently use resources according to EU standards. Energy planning and renewable energy expert; developed a scenario model. Client: Eptisa (Spain), commissioned by the European Commission.
June 2010 – May 2013	European Union EurObservER (www.eurobserver.org). Monitor and analyse the progress of renewable energy in every Member State of the European Union. Technical Expert; responsible for Denmark, Finland and Sweden. Client: Observ'ER (Paris), commissioned by the European Commission.
April 2011	The Philippines Finalisation of the SWITCH policy support component programme in the Philippines. The objective of the mission was to draft a project to support the development and implementation of SCP (Sustainable Consumption and Production) policies in the Philippines, in line with existing government priorities. Support to the implementation of the main renewable energy policies and laws was one of two components. Renewable Energy Expert. Client: EU Delegation to the Philippines
November 2010 – February 2011	Denmark Forecasting fuel prices until 2035. Interviews, literature surveys, analyses of resource potentials, supply-demand balances, influence of incentive mechanisms and other price drivers to determine price scenarios. Project Manager of prices on biomass sources for energy use. Client: Danish Energy Agency; in a consortium with Ea Energy Analyses.
July – December 2010 and September – December 2011	Global The Global Technology Needs Assessment (TNA) project is designed to support 35 to 45 countries to carry out improved TNAs within the framework of the UNFCCC. This assignment will produce a guidebook to assist the countries to identify market

	barriers hindering the transfer and diffusion of climate change mitigation and adaptation technologies and develop enabling frameworks to overcome the barriers and facilitate the transfer, adoption and diffusion of selected technologies in the participant countries. Lead author. Client: UNEP (United Nations Environment Programme) Risoe Centre, Denmark.
January – September 2010	Denmark Danish Commission on Climate Change Policy. It is the Government's vision that Denmark in the future shall be completely independent of the use of fossil fuels. For this reason, the Government appointed a Commission on Climate Change Policy in March 2008. The Commission presented its findings in September 2010. Internal consultant in the Secretariat.
January 2009 – April 2010	Denmark Advanced waste-to-energy technologies. The client has decided to establish a new large waste treatment plant, which shall include the most environmentally benign and feasible technologies in an integrated 'environmental park'. This may include anaerobic digestion of wet waste fractions and thermal gasification (or pyrolysis) of dry fractions for combined heat and power production and production of biofuels for vehicles. The current project is a pre-decision study, prior to detailed engineering. Client: Vestforbrænding I/S (the largest waste management company in Denmark). Technical Expert on biogas (anaerobic digestion) and thermal gasification (4 manmonths).
October 2008 – January 2009	Denmark Climate Plan Copenhagen 2015. Development of a comprehensive plan and ranking of concrete measures for climate change mitigation to be adopted by the City Council.Client: Ea Energy Analysis (Denmark), commissioned by the Municipality of Copenhagen. Position: Responsible for energy supply options.
January 2008 – June 2009	Denmark Long-term district heating plan for Greater Copenhagen. The objective was to assess how low-carbon district heating can be developed, while sustaining affordable heat prices. Energy Technology Expert. Client: EA Energy Analysis, Commissioned by the regional district heating companies of Greater Copenhagen (CTR, VEKS and KE).
January – November 2008	Denmark Biotechnology in biogas plants. International competitor analysis of companies, institutions and organisations active in using

	advanced biotechnology in producing biogas from animal manure. Technical Expert. Client: ECON Pöyry, Commissioned by the Danish Environmental Protection Agency.
January – June 2008	India
	Monitoring and reporting greenhouse gasses and other air emissions. Determine Indian capacities to monitor atmospheric pollution from large industrial and power generation sources, develop an overview of potential win-win benefits of climate change and air quality/health policies, and design a pilot project to strengthen monitoring and reporting capacity for atmospheric emissions from those sectors in India. Team Leader. Client: HCL Consultants, commissioned by the European Commission (DG RELEX).
January – October 2008	Russia
	Quality improvement of a locally developed Joint Implementation (JI) Project Design Document for the rehabilitation of Bratsk Hydropower Plant (4500 MW), Irkutsk Oblast. Client: World Bank. Short Term Consultant.
January – April 2008	Peoples' Republic of China
	Design of bilateral renewable energy programme. The 5-year programme (2009-2013) has two components. Boldt was key author of component 'Support to the establishment of a National Renewable Energy Centre of China'. Renewable Energy Expert. Client: EA Energy Analysis / Nordic Consulting Group, commissioned by Danida.
October 2007 – January 2008	Denmark
	Forecasting prices on biomass sources for energy use until 2030. Client: Danish Energy Agency. Project Manager.
August 2007 – April 2008	Nordic countries
	The expanding Bioenergy market in the Nordic Countries - Possibilities and Consequences. Energy Technology Expert. Client: ECON Analysis, commissioned by the Nordic Energy Research Council.
August – November 2007	Uzbekistan
	Develop Project Design Documents (PDD) for two CDM projects: 370 MW gas turbine combined cycle power plant in Tashkent, and utilization of associated gas from four oil fields in Shurtan, Qarshi. Client: Econ Analysis, commissioned by the World Bank.
February – April 2007	Indonesia

	Design of energy programme component as part of an environmental support programme (2008-2012) between the governments of Indonesia and Denmark. Energy efficiency expert. Client: Ministry of Foreign Affairs (Danida)
January – October 2007	OECD Countries Costs and benefits of renewable energy compared to traditional energy sources, including costs of externalities. A project under the International Energy Agency's Implementing Agreement for Renewable Energy Technology Deployment (www.recabs.org). Energy Technology Expert. Client: EA Energy Analysis, commissioned by the International Energy Agency.
January – June 2007	Kyrgyzstan and Uzbekistan Using carbon finance to promote sustainable development. Identification and preliminary development of CDM projects. CDM expert. Client: The World Bank.
August 2006 – June 2007	Kenya, Tanzania, and Uganda Mitigating risk and strengthening capacities for rural electricity investment in Africa (MIRREIA). Recommendations for policy and regulatory actions to promote renewable energy investments. Guidebook for investors. Senior energy policy expert. Client: Intelligent Energy – Europe, European Commission.
June – December 2006	Cambodia, Laos and Vietnam Formulation of draft renewable energy laws for Cambodia and Vietnam, road map for a renewable energy policy in Laos. Senior energy policy expert. Client: ASEAN Centre for Energy (ACE); The EU-ASEAN Energy facility.
September 2004 – ongoing	Denmark Expert evaluator of proposals on bioenergy, primarily biogas, submitted to the Danish Energy Research & Development Programme (EUDP in Danish) in respond to calls twice a year. Client: Danish Energy Agency.
March 2006 – February 2007	European Union Expert evaluator of project proposals submitted to the programme "Intelligent Energy – Europe", the sub-programmes ALTENER (renewable energy), SAVE (energy efficiency) and COOPENER (promotion of renewable energy sources and energy efficiency in the developing countries). Client: European Commission, DG Transport and Energy, Intelligent Energy Executive Agency.
December 2005 –	Denmark

June 2006

National CDM strategy.
Development of strategy, action plan, information programme, and manuals and guidelines on the Clean Development Mechanism (CDM) of the Kyoto Protocol.
Deputy project manager. Client: Ministry of Foreign Affairs.

October 2005 – May 2006 — Asia

Cross border energy trade and the poor.
Policy recommendations to governments and to UNDP on how to minimise the negative impacts of energy trade on the poor and increase the benefits of such trade for the poor.
Electricity sector expert. Client: UNDP.

September 2005 – October 2008 — Denmark

Action plan for Denmark's international cooperation within research, development and demonstration of energy technologies and support to the Danish Energy Agency's participation in the steering committees of the European Commission's framework programmes for research, technology and demonstration and its programme Intelligent Energy- Europe.
Project manager. Client: Danish Energy Agency.

June – September 2005 — Denmark

Cross-cutting analysis of eight existing strategies for research, development and demonstration of energy technologies as input to an overall national strategy for innovation and growth in the energy sector, developed by the Advisory Committee on Energy Research (ACER). ACER advises the Danish Energy Authority and Energinet.dk (the electricity system operator) in implementing their energy R&D&D programmes.
Project Manager. Client: Danish Energy Authority.

February 1999 – May 2005 — **Rambøll Denmark**

Chief Consultant

2004 – 2005 — Armenia and Georgia

Development of potential CDM projects in Armenia and Georgia
The objectives of the project are to: 1) Identify and screen potential projects for implementation as CDM projects; 2) Prepare Project Design Documents, Baseline Studies, and Monitoring and Verification Plans for two selected projects.
Project Manager.
Client: Danish Environmental Protection Agency

2004 - 2005 — Azerbaijan, Uzbekistan and Kyrghyzstan

Development of potential CDM projects in Azerbaijan, Uzbekistan and Kyrghyzstan.
The objectives of the project were to: 1) Identify and screen potential projects for implementation as CDM projects; 2) Prepare Project Design Documents, Baseline Studies, and Monitoring and

Verification Plans for two selected projects.
Project Manager.
Client: Danish Environmental Protection Agency

2004 – 2005 Nile Equatorial Basin

Periodic independent reviews and strategic guidance to the Strategic/Sectoral Social and Environmental Assessment of Power Development Options in the Nile Equatorial Basin - Burundi, D.R. Congo, Kenya, Rwanda, Tanzania, and Uganda.
Independent Reviewer. Client: World Bank

2004 – 2005 Bulgaria

Development of JI projects in Bulgaria.
The objectives of the project were to: i) Develop projects to be implemented as JI projects in Bulgaria according to principles embedded in the Kyoto Protocol. ii) Prepare Project Design Documents (including Baseline Studies and Monitoring and Verification Plans) for four selected projects in Bulgaria. iii) Provide support to DEPA in preparing and negotiating Emission Reduction Purchase Agreements.
Project Manager.
Client: Danish Environmental Protection Agency

2004 – 2005 South Africa

Productive use of landfill gas in Johannesburg.
The objective was the successful and timely development of a CDM project up to the point of financing.
Project Manager.
Client: Danida.

2004 – 2005 Kazakhstan

Development of potential CDM projects in Kazakhstan.
The objectives of the project were to: 1) Identify and screen potential projects for implementation as CDM projects; 2) Prepare Project Design Documents, Baseline Studies, and Monitoring and Verification Plans for two selected projects.
Project Manager.
Client: Danish Environmental Protection Agency

11.03 – 03.04 Ghana

Poverty and social impact analysis (PSIA) on electricity tariffs: (i) the efficiency of the current tariffs in protecting the poor by looking at the percentage of leakage and the percentage of poor with access; (ii) the likely implications of cross-subsidies on the financial viability of the utility in terms of whether a large percentage of customers are likely to drop into the lifeline category, either through reduced consumption or through corruption; (iii) the impact and behavioural responses to the large recent adjustments in tariffs and corollary impacts on

access by the poor; and (iv) the winners and losers from potential changes in the sector structure.
Project Manager (international team)
Client: World Bank

03.03 – 02.04 Ghana

Strategy for the World Bank's assistance to the energy sector in Ghana.
The objectives were (i) to provide a comprehensive review of the whole range of energy sector issues in order to inform the World Bank of its strategy with respect to engagement in the Ghanaian energy sector in assisting the Government in achieving its poverty reduction agenda and for energy interventions in various sectors, and (ii) to lay out the key issues and implications for the Bank's operational dialogue and work programme.
Focus areas: 1) Power sector reform; 2) Petroleum sector reform; 3) Cross-border electricity and gas interconnections; 4) Energy and economic growth in rural Ghana.
Team Leader. Client: World Bank

2002 – 2004 Estonia

Long-term Assistance to Energy Market Inspectorate Tallinn, Estonia. Methods for Energy Market Regulation.
The Estonian Energy Market Inspectorate (EMI) is responsible for implementing the state control, supervision of and monitoring the fuel and energy markets. The main tasks were licensing of energy companies, the regulation of power transmission, distribution and power plants dominating the market, the regulation of district heating companies, and controlling tariffs on fuels, electricity and district heating.
A Danish consortium, with Ramboll as lead, implemented the project together with local consultants.
The project had two key components: 1) Technical assistance to the development of primary and secondary legislation within three sectors (electricity, gas and district heat, and liquid fuels), and 2) Capacity development of the Inspectorate, among others by facilitating sustainable twinning arrangements with similar institutions in the region and within EU.
Project Manager. Client: Danish Energy Authority

04-09.02 South Africa

Green Electricity for the World Summit on Sustainable Development, Johannesburg August – September 2002.
The objective was to create a dedicated market place for renewable energy within the framework of the emerging privatised electricity market in South Africa. The scope was long-term, but for publicity reasons the key milestone was to supply the venues of the World Summit with electricity generated from renewable energy through market-based mechanisms.
International Consultant.
Clients: Department of Environmental Affairs and USAID

04-08.02	Ghana
	Strategic National Energy Plan 2000-2020. Expert on integrated resource planning in the electricity sector. The objective was to determine the optimum balance between supply options and measures to enhance energy efficiency and conservation. Client: Danida
10.01 – 04.02	Namibia
	Capacity Building in Renewable Energy and Energy Efficiency in Namibia. Project design. Team Leader. Clients: Ministry of Minerals and Energy and Danced
01-11.01	Malaysia
	Capacity Development on Integrated Resource Planning in Government and Related Agencies – Malaysian Energy Centre (PTM). Energy supply expert. Clients: Ministry of Energy, Communications and Multimedia and Danced
11.00 - 01.01	Namibia
	Renewable Energy and Energy Efficiency in Namibia. Programme Formulation Mission. Team Leader. Clients: Ministry of Minerals and Energy and Danced
2000 - 2006	Denmark
	Internal Consultant for Elkraft System (Electricity system operator in East Denmark) for the evaluation of RD&D applications in accordance with Public Service Obligations on clean generation of electricity and heat. Field of responsibility: All renewables except wind energy.
07-12.00	South Africa
	Renewable Energy Independent Power Production in South Africa. The objective was: 1) to identify and rank barriers for the successful development of renewable energy independent power producers in a market-based electricity system, and 2) to suggest means to overcome those barriers. Team Leader. Clients: Department of Minerals and Energy and Danced
2000 – 2002	Swaziland
	Swaziland National Energy Policy. Electricity sector advisor; elaborated report on renewable energy independent power production in Swaziland. Clients: Ministry of Natural Resources and Energy, and Danced
2000 – 2001	Baltic Sea Region
	Integrated Gas and Electricity Study in the Baltic Sea Region.

	RAMBOLL was the lead consultant, for 31 gas and power companies under Baltic Gas and BALTREL. The main objective of the study was to "identify ways to improve conditions for a balanced development of gas and electricity infrastructure in the region, focusing on the needs and expectations of gas and electricity companies in the gas-power interface". The work included the impact of liberalisation in the energy sectors by comparing both products and tariff structures in the power and gas sectors. Electricity expert. Clients: Baltrel and Baltic Gas (co-funded by the European Commission's Trans European Networks (TEN) programme)
02-08.00	Denmark
	Strategy for the Danish Committee for Clean Generation of Electricity and Heat. The Committee advised the Danish Energy Agency in its RD&D support programmes on renewable energy, primarily biomass energy. The objective of the project was to identify the barriers for further development of renewable energy, and in that framework to suggest the most appropriate RD&D topics. Project Manager. Client: Danish Energy Agency
2000 – 2003	South Africa
	South Africa Wind Energy Programme: The Darling Demonstration Wind Farm Project. Wind measurements and wind resource assessment, environmental impact assessment, power purchase agreement, overall project facilitation. Project manager. Clients: Department of Minerals and Energy and Danida (until 2001: Danced)
09.99	Thailand
	Renewable Energy and Energy Efficiency in Thailand. Programme Formulation Mission. Renewable energy expert. Client: Danced
07.99 – 01.00	Denmark
	Economic evaluation of renewable energy in an open electricity market. The project analysed concrete on-going and proposed demonstration projects in order to identify subsidies (in the form of tradable green certificates) needed to overcome the economic barriers for renewable energy technologies. Project Manager. Client: Danish Energy Agency
04.99 – 06.00	Baltic Sea Region
	Baltic Sustainable Energy Cities (BASEC). A number of capital and other cities around the Baltic Sea had joined efforts to counter the threats facing district heating and combined heat and power production in the region. The aim of the project was to strengthen the position of district heating by

setting up twinning arrangements between city administrations and between district heating companies, and by forming a regional political platform for cities and district heating companies.
Manager of secretariat.
Client: Danish Energy Agency.

03.99 – 05.99 Malaysia

Renewable Energy and Energy Efficiency in Malaysia.
Programme Formulation Mission. Team leader and renewable energy expert.
Client: Danced.

02.99 – 06.99 Poland

Sustainable production and use of wood residues for energy purposes in the municipality of Wejherowo, Gdansk region.
Feasibility analysis.
Project manager.
Client: Danish Ministry of Environment and Energy.

February 1996 – January 1999 Indonesia

EC Senior Adviser (resident) at the ASEAN-EC Energy Management Training and Research Centre (AEEMTRC). AEEMTRC, transformed into the ASEAN Centre for Energy (ACE) by January 1999, was supporting the energy co-operation between the European Union and the Association of South-East Asian Nations (ASEAN) and among the ASEAN Member Countries by collecting, collating and disseminating energy information; by conducting seminars and workshops; by facilitating regional projects, in particular a regional gas transmission system and a regional power grid. AEEMTRC was primarily financed by the European Commission and had 12-15 academic staff members.
Client: European Commission, DG IB

November 1991 – January 1996 **Danish Energy Agency (DEA), Ministry of Environment and Energy**

Head of Bio-energy Section, Renewable Energy Division

The section, manned by five academics, was the executive and administrative body of the Action Programme for Bioenergy in Denmark, including a development programme of EUR 6-8 million per year and a demonstration programme of EUR 7 million per year. The section was active in several international projects and programmes

DEA was the energy wing of the ministry, preparing and executing political decisions

1995 – 1996 European Union

Danish representative in three European networks on bioenergy.
Client: European Commission, DG XVII (ALTENER).

1994 – 1996	European Union
	The 9'th European Bioenergy Conference and 1'st European Energy from Biomass Technology Exhibition. Chairman of Local Organizing Committee. The conference was organized in cooperation with the European Commission, Directorate Generals VI, XII and XVII. The conference took place in Copenhagen, June 1996.
1994 – 1996	Denmark
	National Committee on Biofuels. The Committee developed a national action plan for biofuels. Chairman
1994	European Union
	External expert for evaluation of the programme 'Research, Technological Development and Demonstration in the field of Agriculture and Agro-Industry, including Fisheries'. Client: European Commission, DG XII
1993 – 1996	International Energy Agency
	IEA's Bioenergy programme. Danish representative in various working and steering groups
1992 – 1995	ASEAN countries
	The section was one of two so-called Euro Centres in the EC-ASEAN COGEN Programme, which is an economic cooperation programme between the Commission of the European Communities and the Association of South East Asian Nations (ASEAN). The programme concerns transfer of technology in the field of heat and power generation from biomass and residues. Client: European Commission, Directorate General I. Primary contractor: Asian Institute of Technology, Bangkok
February 1990 – October 1991	**Rambøll, Consulting Engineers**
	Senior Energy Consultant
	Coordinator for the Rambøll group in charge of strategic planning and marketing in Denmark and abroad within the energy sector.
	In charge of renewable energy projects abroad
1991	Denmark
	Project manager for elaboration of a long-term strategy and a short-term plan of action for the intensified utilization of renewable energy in Denmark. Client: Ministry of Energy
1990 – 1991	Poland
	Project manager for the application of Danish experiences with energy planning in the municipality of Gliwice, Katowice region.

	Client: Danish East European Fund
1990 – 1991	Germany
	Transfer of Danish experiences with small-scale cogeneration of heat and electricity to the state of Schleswig-Holstein. Client: Ministry for Energy, Social Affairs and Health, Schleswig-Holstein
1990	Nigeria
	Rural energy specialist on a plan elaborated for the promotion of renewable energy and more efficient use of fossil fuels as an integral component of the North East Arid Zone Development Programme. Client: Borno State Government and the Commission of the European Communities.
December 1986 – January 1990	**Danish Energy Agency, Ministry of Energy**
	Head of the Unit for Combined Heat and Power Production.
	Responsible for the planning, as well as the economical and technical evaluations within a national programme to install approx. 100 small-scale power plants based on natural gas and biomass. Also responsible for the legal approval of each new plant.
1987 – 1988	India
	Feasibility study on introducing windmills for water pumping in the coastal area of West Bengal. Marketing analysis together with technical, economical and socio-economic evaluations. Client: Danida's Research Council, Denmark
1985 – November 1986	**Technical University of Denmark, Laboratory for Energy Engineering**
	Assistant professor. Head of the unit for renewable energy for developing countries. Major activities: Continued previous activities (see 1980-85).
1980 – 1985	**Technical University of Denmark, Laboratory for Energy Engineering**
	Research associate. Head of unit for renewable energy for developing countries.
	Evaluator of proposals submitted to the Commission of the European Communities' energy demonstration programme, appointed by the Danish Energy Agency.
	Feasibility study on the economic and technological aspects of increased use of renewable energy in Tanzania.
	Research and development on solar powered water pump, windmill driven water pumps, wood and charcoal stoves and other

rural energy technologies for the developing countries.

Research project (Ph.D. thesis): Techno-economical evaluation of seasonal thermal energy storage.
Client: Ministry of Energy, Denmark

Economical and technological evaluation of solar assisted ground-water heatpumps.
Client: Ministry of Energy, Denmark

Developed a new teaching method for 1st year students, acted as coordinator in introducing this method for all institutes within the Faculty of Mechanical Engineering, and established a new set-up for introducing an educational system within petroleum engineering at the University.

1982 – 1985 The Municipality of Gladsaxe, Denmark

Member of the municipal council of a municipality with 60,000 inhabitants. Member of the council's Committee of Social Affairs and the Committee of Cultural Affairs together with a number of secondary bodies.

1979 – 1980 **University of Dar es Salaam, Tanzania. Faculty of Engineering**.

Research associate

Constructed and tested a solar powered water pump in a village in co-operation with the Tanzanian Ministry for Water, Energy and Minerals, and the regional authorities of the Coastal Region.
Project manager.
Client: Danida

1977 – 1979 **Technical University of Denmark, Laboratory for Energy Engineering**

Research Associate

Invented and developed a solar powered water pump.
Client: Ministry of Energy, Denmark

Techno-economical evaluation of the feasibility of introducing small-scale power production in the Danish power system.
Client: Ministry of Energy, Denmark

Languages

	Speaking	Reading	Writing
Danish	Mother tongue		
English	Excellent	Excellent	Excellent
French	Fair	Good	Fair
German	Fair	Good	Fair
Bahasa Indonesia	Good	Good	Fair
Swahili	Fair	Good	Fair
Spanish	Poor	Fair	Poor

Special appointments	External examiner at Roskilde University, Denmark. 1999 - Internal Consultant for Energinet.dk (Electricity system operator in Denmark) for the evaluation of RD&D applications in accordance with Public Service Obligations. 2000 – ongoing. Short Term Consultant, the World Bank. 2004 – 2005.
Teaching experience	1986 – 88 Supervised a Ph.D. thesis on energy systems analysis. Laboratory for Energetics, Technical University of Denmark 1981 – 87 Supervised three master theses on water-pumping windmills for developing countries and four master theses on energy systems analysis. Laboratory for Energetics, Technical University of Denmark. 1977 – 87 Supervised approx. 30 project courses on individual group basis. 1984 – 86 Revised and instructed a course on energy systems analysis for 4th year mechanical engineering students. Laboratory for Energetics, technical University of Denmark.
Publications	2009 J. Boldt (main author) et al: “Technologies for district heating” (in Danish), June 2009. EA Energy Analysis for the regional district heating companies of Greater Copenhagen. 2009 J. Boldt (main author) et al: “Climate Plan for Copenhagen Municipality 2015 – Measures and incentives for Energy Supply” (in Danish). EA Energy Analysis for the Municipality of Copenhagen, January 2009. J. Boldt: “Future prices on biomass for energy production”, January 2009. Published by Danish Energy Agency. 2007 J. Boldt (main author): “Renewable energy costs and benefits for society”, December 2007. EA Energy Analysis for the International Energy Agency. http://recabs.iea-retd.org/downloads 2007 J. Boldt: “Institutions and processes”, “Policy and regulation”, “Project investor manual” (Kenya, Tanzania, and Uganda), December 2007. Project ‘Mitigating Risk and Strengthening Capacity for Rural Electricity Investment in Africa’ (MIRREIA). ESD for European Commission. http://mirreia.energyprojects.net 2005 J. Boldt (main author) et al: “Technology data for electricity and heat generating plants”, March 2005. Published by Danish

Energy Agency; http://www.ens.dk/da-dk/info/talogkort/fremskrivninger/analyser/beregningsforudsatninger/documents/technology_data_march05.pdf

2003
J. Boldt et al: “South Africa Wind Energy Programme: The Darling Demonstration Wind Farm Project – Barrier Mitigation. Completion Report”

2001
J. Boldt et al: “Bulk Renewable Energy Independent Power Producers in South Africa”, Department of Minerals and Energy, South Africa, January 2001.

2000
“Strategy for the National Committee on Clean production of Electricity and Heat” (key focus on biomass technologies). J. Boldt as project manager and key author.

2000
“Renewable Energy in Denmark – a history of 25 years growth”. A history book (365 pages) written together with 5 other authors. J. Boldt author of the biomass chapter.

1997
J. Boldt: “Development of the ASEAN Natural Gas Grid and Business Potential”. Invited paper presented at ‘Asian Energy Conference: Financing Asia’s Infrastructure’, November 1997, Singapore.

J. Boldt: “Opportunities for European Energy Know-how and Technology in ASEAN”. Paper presented in Danish Energy Association, Copenhagen, September 1997.

1996
J. Boldt: “Energy Policies: Priorities and Perspectives. The European Experience”. Paper presented at AEEMTRC’s Seminar-Workshop on ASEAN 2020, Indonesia, 1996.

J. Boldt: “Commercialisation and Financing of Renewable Energy – the EU Experience”. Paper presented at the ‘3rd International Renewable Energy – Asia Pacific ‘96’, Manila, October 1996.

1995
J. Boldt: "Current Status and Future Prospects for Dedicated Energy Crops in Denmark". Invited paper published by IEA's CADDET Centre for Renewable Energy.

Biomasseudvalget: "Bioenergi Udviklingsprogram 95l"
(Committee on Biomass for Energy Production: "Bioenergy Development Programme 95").
Danish Energy Agency, 1995.
J. Boldt as project manager. 130 pages.

1994
J. Boldt: "Biomass, Economic Competitivity and Social

Implication".
Invited paper, 8'the European Conference on Biomass for Energy, Environment, Agriculture and Industry, Vienna, October 1994.

J. Boldt and P.E. Poulsen: "The Utilization of Landfill Site Gas - Opportunities and Obstacles". Growth (periodical published by Danish Land Development Service), No. 6, 1993, p. 14-15.

1993
P. Boiux, L. Lacrosse, M. Pennington, J. Boldt, Y. Schenkel: "The EC-ASEAN COGEN Programme". European seminar Biowatt, Milan, October 1993. 8 pages.

J. Boldt: "Bioenergy in Denmark". Paper presented at the Nordic Bioenergy Conference, Helsinki, November 1993. 19 pages.

S. Tafdrup and J. Boldt: "Centralized Biogas Plants in Denmark". Paper presented at the Nordic Bioenergy Conference, Helsinki, November 1993. 18 pages.

1992
Biomasseudvalget: "3-årigt udviklingsprogram for biomasse til energiformål" (Committee on Biomass for Energy Production: "A three year national development programme on bio-energy"). Danish Energy Agency, 1992.
J. Boldt as project manager. 110 pages.

1991
Energistyrelsens rådgivende udvalg for vedvarende energi (VE-Rådet): "Handlingsplan for Vedvarende Energi 1992-94" (Danish Council for Renewable Energy: Plan of Action for Renewable Energy, 1992-94).
J. Boldt as project manager. 110 pages.

1990
J. Boldt: "Fuelling a sustainable development". North East Arid Zone Development Programme, Borno State, Nigeria. 80 pages.

J. Boldt: "Fælles energi - fælles fremtid" (Common Energy-Common Future). NOAH's Forlag, Copenhagen. 260 pages.

J. Boldt: "Choice of Technology". Ch. 6 in "Environmental Engineering in Developing Countries". Edited by E. Dahi. Polyteknisk Forlag. ISBN 87-502-0701-6.

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